

Federal Highway Administration's (FHWA) Surface Transportation Environment and Planning Cooperative Research Program (STEP) Bulletin Hot Topic: Transportation and Climate Change



The FHWA's STEP initiates cutting-edge research in several areas of interest to the transportation community and public at large. Future editions of the STEP Bulletin will highlight a hot topic from one of the STEP emphasis areas. This edition highlights research within STEP's Air Quality and Climate Change research area.

The transportation sector is responsible for approximately 29 percent of Greenhouse Gas (GHG) emissions in the United States and is expected to be one of the fastest growing sources of GHG emissions in the foreseeable future. As a result, the transportation sector is leading efforts to develop solutions.

The FHWA is undertaking various activities and initiatives to conduct research, facilitate partnerships and develop strategies to address climate change. As part of the research conducted with STEP funds, the FHWA has undertaken and completed a variety of efforts to address this national priority.

HOW IS FHWA USING STEP FUNDS TO ADDRESS CLIMATE CHANGE?

Below are a few examples of how FHWA is using STEP resources to address Climate Change:

Carbon Sequestration Pilot Program is developing and testing strategies to sequester carbon on highway rights-of-way and other land managed by State DOTs.

Transportation and Climate Change Newsletter and Web site were recently launched. The monthly [Transportation and Climate Change Newsletter](#) and FHWA's new web site disseminate research results, climate change activities and resources to FHWA employees and stakeholders.

Gulf Coast Study Phase I examined the potential climate change impacts on transportation infrastructure and highlighted the need for transportation systems to adapt to future climate change issues.

Gulf Coast Study Phase II is underway and includes in-depth assessments of impacts and risks to selected sub-locations.

U.S. DOT's *Transportation and Climate Change Clearinghouse*, www.climate.dot.gov, was developed by FHWA, U.S. DOT's Center for Climate Change and Environmental Forecasting and the National Cooperative Highway Research Program to serve as a one-stop source of information for the transportation community on transportation and climate change issues.



Map of Gulf Coast Highways Under 4' SLR



U.S. DOT's Transportation and Climate Change Clearinghouse Web Site

FHWA's STEP Hot Topic: Transportation and Climate Change

FY 2009 CLIMATE CHANGE RESEARCH

In FY 2009, FHWA will continue to research:

- Cost-effective strategies to mitigate GHG emissions
- How impacts of climate change will affect transportation infrastructure
- How to integrate climate change considerations into the transportation planning process
- How sustainable transportation efforts, such as the use of brownfields, can reduce GHG and improve air quality while meeting transportation needs
- The role of mega-regions in emissions reduction, and how transportation demand management and land use planning activities could reduce GHG emissions

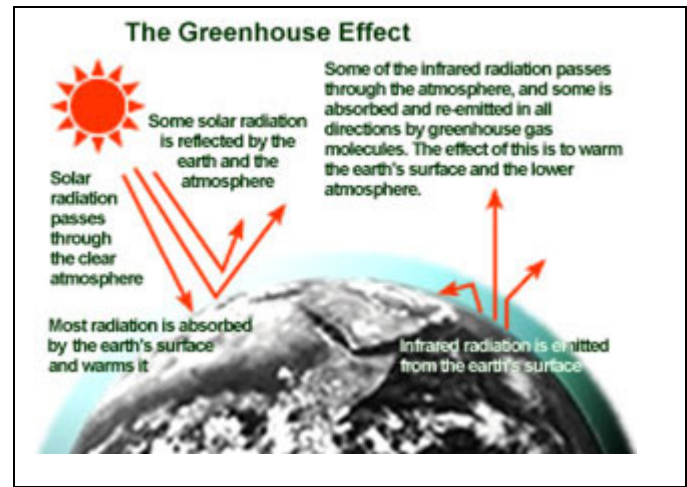


Illustration of the Greenhouse Effect process

Efforts to educate stakeholders and the public on transportation and climate change issues will also continue in FY 2009. Additional information on FHWA's Transportation and Climate Change activities can be found at www.fhwa.dot.gov/hep/climate.

UPCOMING CLIMATE CHANGE RELATED TRAINING AND EVENTS:

- 2009 Association for Commuter Transportation International Conference, August 30-September 2 in Washington, DC. FHWA will make a presentation on transportation and climate change.
<http://web.memberclicks.com/mc/page.do?sitePageId=79427&orgId=asct>
- Harmonizing Greenhouse Gas Assessment and Reporting Processes, August 31-September 2 in Baltimore, MD
http://www.awma.org/events/view_event.html?typeid=1&id=118
- 19th International Clean Air and Environment Conference, September 6-9 in Perth, Australia
<http://www.iceaustralia.com/casanz2009/>
- U.S. Transportation System Scenarios to 2050 in a World Addressing Climate Change Webinar, September 10, 2009 from 2:30 PM – 4:00 PM EDT
<https://www1.gotomeeting.com/register/977805225>
- [International Conference on Ecology & Transportation](#), September 13-17, 2009 in Duluth, MN
- American Public Transportation Association Annual Meeting, October 4-7, 2009 in Orlando, FL
http://www.apta.com/conferences_calendar/annual/documents/preliminary_09.pdf
- [Greener Skies 2009](#), October 7, 2009 in Hong Kong
- [Algae Biofuels and Biomass Production Summit](#), October 7 – 9, 2009 in San Diego, CA
- [Association of Metropolitan Planning Organizations 2009 Annual Conference](#), October 27 – 30, 2009 in Savannah, GA
- [The 9th National Conference on Access Management "Sustainable Solutions for Transportation"](#), October 10 – 13, 2010 in Natchez, MS

For additional information on FHWA's Transportation and Climate Change-related events, please visit:
<http://climate.dot.gov/calendar-of-events.html>